

fig. 1 (1830); de Wint. in Anders. Zool. Egypt, Mamm. p. 322 (1902).

♂. Sinai, 23rd May, 1911.

This specimen, which was brought back from Sinai, through the courtesy of Capt. J. Falconer Bey, is in very rough and worn pelage. It has not yet been recorded from Egypt, and may be distinguished from *L. aegyptius* by its paler coloration and shorter hind foot.

PROCAVIA sp. ?

A fine example of a Hyrax, which was taken near Ras Gurdi, between Keneh and the Red Sea, was recently sent home. As the locality is very near the spot where the examples of *P. burtoni* mentioned in my previous paper came from, it is more than likely that this specimen also belongs to that species. It shows, however, the yellow spot round the dorsal gland which is absent in other examples of *P. burtoni*, although present in *P. ruficeps*; on the other hand, the head does not show the rufous tinge characteristic of the last-mentioned form. Unfortunately the skull, which would have settled the difficulty, was accidentally lost. I incline to the belief, however, that it is *P. burtoni*, and if so it must be borne in mind that when in worn pelage this species *may* show the yellow dorsal spot. The teeth, however, would form a definite distinguishing character.

EXHIBITIONS AND NOTICES.

February 6, 1912.

E. G. B. MEADE-WALDO, Esq., Vice-President,
in the Chair.

THE SECRETARY read the following report on the additions made to the Society's Menagerie during the months of November and December, 1911, and January, 1912:—

NOVEMBER.

The registered additions to the Society's Menagerie during the month of November were 247 in number. Of these, 119 were acquired by presentation, 28 by purchase, 17 were received on deposit, 77 in exchange, and 6 were born in the Gardens.

The total number of departures during the month, by death and removals, was 261.

Amongst the additions special attention may be called to the following:—

1 Spotted Hyæna (*Hyæna crocuta*) and 1 Crowned Duiker (*Cephalophus coronatus*), from the Gold Coast, presented by Capt. C. H. Armitage, D.S.O., on November 6th.

1 Kashmirian Deer (*Cervus kashmeerianus*), from Kashmir, presented by H.G. the Duke of Bedford, K.G., President of the Society, on November 16th.

4 Reindeer (*Rangifer tarandus*), from Lapland, presented by the European Construction Co., on November 11th.

1 Tasmanian Wolf (*Thylacynus cynocephalus*), 5 Tasmanian Devils (*Sarcophilus satanicus*), and 2 Bennett's Wallabies (*Macropus bennetti*), from Tasmania, purchased on November 21st.

A collection of small rodents containing several species new to the Collection, and specimens of two species of Elephant-Shrews, both new to the Collection, from Bechuanaland, presented by Capt. H. A. P. Littledale, F.Z.S., on November 18th.

A Hunting-Dog (*Lycabn pictus somalicus*), from Somaliland, presented by Lieut. H. C. Dobbs, I.A., on November 21st.

A Bengal Fox (*Vulpes bengalensis*), from Bombay, presented by Alfred W. Hanckel, Esq., on November 10th.

A Long-eared Fox (*Otocyon megalotis*), from South Africa, forwarded by Dr. Louis Péringuey, C.M.Z.S., on November 18th.

2 Ruffed Lorikeets (*Calliptilus solitarius*), from the Fiji Islands, new to the Collection, received on deposit on November 6th.

1 Aztec Jay (*Cyanocitta stelleri azteca*), from Mexico, and 2 Swamp-Sparrows (*Melospiza georgiana*), from North America, new to the Collection, received in exchange on November 8th.

2 Cuban Banded Woodpeckers (*Nesocoleus fernandineæ*), 1 Cuban Green Woodpecker (*Xiphidiopicus percussus*), and 4 Black-throated Crested Quails (*Eupsychortyx nigrigularis*), the latter from Central America, all new to the Collection, received in exchange on November 22nd.

DECEMBER.

The registered additions to the Society's Ménagerie during the month of December were 88 in number. Of these, 38 were acquired by presentation, 2 by purchase, 31 were received on deposit, 14 in exchange, and 3 were born in the Gardens.

The total number of departures during the month, by death and removals, was 211.

Amongst the additions special attention may be called to the following:—

1 Wild Cat (*Felis sylvestris*); from Inverness-shire, purchased on December 20th.

4 Arctic Foxes (*Vulpes lagopus*), from Spitzbergen, deposited on December 11th.

6 Green White-eyes (*Zosterops virens*), from South Africa, new to the Collection, received in exchange on December 16th.

1 Concave-casqued Hornbill (*Dichoceros bicornis*), from India, received in exchange on December 1st.

4 Chinese Alligators (*Alligator sinensis*), from China, deposited on December 18th.

1 Kirtland's Tree-Snake (*Thelotornis kirtlandi*), 1 Green Tree-Snake (*Dendraspis viridis*), from Dunkwa, presented by Dr. H. G. F. Spurrell, F.Z.S., on December 16th.

JANUARY.

The registered additions to the Society's Menagerie during the month of January were 88 in number. Of these, 50 were acquired by presentation, 3 by purchase, 11 were received on deposit, 5 in exchange, and 19 were born in the Gardens.

The total number of departures during the month, by death and removals, was 267.

Amongst the additions special attention may be called to the following:—

1 White-throated Capuchin (*Cebus hypoleucus*), from Panama, presented by Francis Wright, Esq., on January 31st.

2 Grand Galagos (*Galago crassicaudata*), and 1 Blotched Genet (*Genetta tigrina*), from the Transvaal, presented by Commander F. J. Moseley, on January 20th.

1 African Red-winged Starling (*Amydrus morio*), from S. Africa, new to the Collection, received in exchange on January 3rd.

1 Yellow-rumped Hangnest (*Pseudoleistes guirahuro*), from S. America, new to the Collection, presented by Miss V. Bromwich on January 22nd.

1 Yellow-lored Amazon (*Chrysotis xantholora*), from Paraguay, purchased on January 4th.

2 Blue-rumped Parrakeets (*Psittinus incertus*), from Malacca, received in exchange on January 3rd.

1 Abyssinian Love-bird (*Agapornis taranta*), new to the Collection, deposited on January 3rd.

1 Calabar Snake (*Calabaria reinhardti*), from W. Africa, new to the Collection, presented by S. H. Carnelley, Esq., on January 16th.

1 Schott's Snake (*Philodryas schotti*), from S. America, new to the Collection, received in exchange on January 18th.

A Colour Phase of the Polecat.

Mr. E. G. B. MEADE-WALDO, V.P.Z.S., exhibited a mounted specimen of a pale fulvous variety of the common wild Polecat (*Putorius putorius*), belonging to the Rev. D. Edmondes Owen, of Llandovery, S. Wales. The animal resembled in colour a well-known variety of the Badger, and was interesting because the Polecats in that particular district were frequently of this peculiar variety and had been well known locally for years.

Retarded Development in a Red Kangaroo.

THE SECRETARY communicated the following account of retarded development of the fœtus in a Red Kangaroo, by Mr. ROBERT D. CARSON, C.M.Z.S. :—

A female Red Kangaroo (*Macropus rufus*) was received at the Philadelphia Zoological Garden, June 5, 1908. On December 15, 1908, the movement indicating a young one was observed in her marsupium; this young one became ♂ No. 21 on our records.

The father of this young one came August 6, 1908, and died October 28, 1908, seven weeks before ♂ No. 21 was noticed.

♂ 21 ceased going into his mother's pouch June 6, 1909, and stopped nursing about November 7, 1909.

On September 25, 1909, movement was again observed in the female's pouch and proved to be what became on our records ♂ No. 22.

As the father of the first one, ♂ No. 21, had been dead 11 months less 3 days and no other male had been with this female nor in the collection, except the older young one, which was still nursing and very small and immature when the second young one was first observed, the question is which animal was the father of the last born?

It does not appear possible that it was the older young male, as that must have been at least two months younger still when conception took place.

As there is no possibility of this female having been impregnated by any other male of her own or any other species, the only explanation appears to be that of retarded development of one egg or fœtus.

In Darwin's 'Descent of Man,' under "Manner of Development" it is stated that "In various Mammals the uterus graduates from a double organ with two distinct orifices and two passages as in the marsupials into a single organ . . . as in the higher apes and man"; also 27 lines further on are six lines indicating possible functional development in the double uterus.

Did the adult male impregnate this female twice, one egg

developing in one half of the uterus while the other lay dormant or developed more slowly in the other half during the months necessary to account for the delay in birth?

Male No. 22 is still living, and is a typical *Macropus rufus*.

PAPERS.

16. Report on the Deaths which occurred in the Zoological Gardens during 1911. By H. G. PLIMMER, F.R.S., F.Z.S., Pathologist to the Society.

[Received February 3, 1912: Read February 6, 1912.]

On January 1st, 1911, the number of animals in the Zoological Gardens was 3184, and during the year 3493 animals were admitted, making a total of 6677 for the year.

The number of deaths during the year has been 1647—that is, a death-rate of 24·6 per cent.; but if from the above total we deduct 801 animals which did not live for six months after their arrival in the Gardens—that is, the time at which we find they have either got over their journeys, or died from any disease they brought with them, or have got fairly used to their new environment—the percentage of deaths is reduced to 12·6, which is considerably less than those of the past three years.

The following figures will show the general results of the last four years:—

	1908.	1909.	1910.	1911.
Total number of animals	5608	5303	5540	6677
Total deaths	1737	1492	1554	1647
Percentage of total deaths	31	28	28	24·6
Percentage of deaths, excluding those which occurred in animals which had <i>not</i> been six months in the Gardens	17	17·8	16·4	12·6

In any case the figures for 1911 show a considerable improvement on those of the last three years, and if the relative numbers be borne in mind, the improvement is much more marked.

The total deaths are divided as follows: Mammals 359, Birds 849, Reptiles 439.

The following tables show the facts ascertained in outline. Table I. sets forth the actual causes of death in each of the three groups specified. Under Reptiles are included Amphibia.